

Appl. No. 10/593,957
Amdt. dated Jan. 25, 2008
Reply to Office action of Oct. 9, 2007

REMARKS

Claims 13, 15, 17, 19, 20, 22, 23, 25-27 and 29-32 are presently in the application.

Claims 1-12, 14, 16, 18, 21, 24 and 28 have been canceled.

The drawings have been objected to as failing to illustrate where the brush holder is fixed on the electrical machine by means of the prestressing element. Also, claims 17-19 have been rejected under 35 U.S.C. 112, first paragraph, as based on a non-enabling disclosure because, according to the examiner, the specification fails to adequately teach how the brush holder is fixed on the electrical machine by means of the prestressing element.

The drawing objection and the 35 U.S.C. 112 rejection are concerned with claims 17-19, which recite that “the brush holder is fixed on the electrical machine by means of the prestressing element.” Applicant’s drawings show bent ends 22, 23 (Fig. 5) of the spring 7 engaged in recesses (see Fig. 4) on the inside of the brush holder receptacle 15 [para. 25] and the spiral spring regions of the spring 7 are held by the tabs 18 and 19 (Fig. 3) formed on the brush holder receptacle 15. A proper understanding of applicant’s specification reveals that the brush holder receptacle 15 is a part of the electrical machine.

The examiner’s confusion may be the result of the fact that in the English-language translation, at some location, for example, paras. 27, 28 and 29, the brush holder receptacle 15 is referred to as the holder. Thus, the examiner may be confusing the brush holder 1 (Fig. 1) with the brush holder receptacle 15.

Appl. No. 10/593,957
Amtd. dated Jan. 25, 2008
Reply to Office action of Oct. 9, 2007

The examiner's attention is directed to the last sentence of para. 25 of the specification, which contains the first reference to element 15 of the drawings. In that sentence, element 15 is described as the "brush holder receptacle 15."

Paras. 27-29 of the specification have been amended to consistently refer to element 15 as the brush holder receptacle 15. A similar change has been made to claims 27 and 29. Claims 27 and 29 now conform to the original specification and drawings. Accordingly, withdrawal of the drawing objection and the section 112 rejection is requested.

Claims 13-16, 27 and 28 have been rejected under 35 U.S.C. 102(b) as anticipated by Dafler et al (US 3,628,075). Reconsideration of the rejection is requested.

To begin with, the examiner's attention is directed to the statement of the rejection found on page 3 of the Office action mailed on October 9, 2007. The examiner states that claims 13-16, 27 and 28 have been rejected under 35 U.S.C. 102(b) as anticipated by Dafler et al. However, the detailed explanation of the rejection also refers to claims 20, 21 and 31.

Clarification from the examiner is requested as to exactly what claims are rejected under 35 U.S.C. 102 and it is requested that a new non-final Office action be mailed. For purposes of this response, the applicant assumes that the examiner intended to include claims 20, 21 and 31 in the statement of the rejection.

Dafler et al discloses a dynamoelectric machine, specifically, a direct current motor, 10 including a brush-holder assembly 12. The dynamoelectric machine 10 comprises a machine housing formed by a main case part 16 and a commutator case part 18. The case part 16 is cup-shaped (Fig. 1) and extends rearwardly from a bearing support end 20 to form a

main section carrying permanent magnet field producing stator assembly 24. A radial lip 26 terminates the rearward end of the case part 16.

In Figs. 1 and 2, the brush-holder assembly 12 is illustrated in its assembled form within the casing part 18 and adjacent the commutator 56. A support plate 64 is carried by the inner wall of a casing end section 27 of casing part 18 and includes an insulating board 65 having brush-holding receptacles 66 and 67 mounted thereon.

The support plate 64, best shown in FIG. 5, includes a mounting ring 68 having holes 70 for receiving screws 72, shown in FIG. 2, for fastening to the casing end section 27 of case part 18. The inner edge 74, which defines a center opening of the mounting ring 68, has a diameter slightly larger than the diameter of the oil slinger 62 shown in FIG. 1. An outer radial section 76 of the support plate 64 extends arcuately approximately 150 degrees from the outer edge 78 of the mounting ring 68. An axial portion 82 offsets the radial section 76 slightly forward of the mounting ring 68 as also illustrated in FIG. 1.

Two arcuately spaced rectangular surfaces 84 and 86 extend in a common radial plane axially forward from the main part of the radial section 76. Two pairs of bendable tabs 88 and 90 are formed on the rectangular surfaces 84 and 86, respectively. These tabs initially project perpendicularly from the rectangular surfaces 84 and 86 so as to be insertable through corresponding pairs of holes 92 and 93 in the insulating board 65.

The radial section 76 of the support plate 64 further includes yieldable clips 94 and 96. Open areas 102 and 104 define arms 106 and 108 formed integrally with the radial section 76 and supported in a cantilever fashion. The arm 106 extends laterally from an outer

Appl. No. 10/593,957
Amdt. dated Jan. 23, 2008
Reply to Office action of Oct. 9, 2007

central part of the radial section 76 toward the outer end of the rectangular surface 86. The arm 108 extends laterally at a location adjacent the outer end of the rectangular surface 84. The narrowly spaced, generally parallel sides of the arms 106 and 108 terminate in T-shaped free ends 110 and 112 which are offset axially forward so that the main parts thereof are coplanar with the rectangular surfaces 84 and 86. The free end 110 includes an axially extending finger 114 at the outer side of the T-shaped end that projects forwardly for a distance approximately 4 times the thickness of the insulating board 65. A wire engaging projection 116 at the inner side of the T-shaped free end 110 also extends axially forward for a distance approximately twice the thickness of the insulating board 65.

The projection 116 is curved slightly to form a concave side facing outward and through an opening 118 in the insulating board 65. In a corresponding manner the T-shaped free end 112 of the arm 108 includes a finger 122 on the radially outer side thereof which extends over the outer edge of the insulating board 65 and a wire engaging projection 124 extending through a hole opening 126 formed in the insulating board 65.

In applying Dafler et al to the claims, the examiner reads the claimed brush holder housing on the “case part” 16 and the T-shaped securing element on the “T-shaped free ends” 110, 112 on arms 106, 108 of support plate 64.

The examiner’s attention is directed to the fact that the “T-shaped free ends” 110, 112 are clearly not formed on the “case part” 16. In applicant’s invention, the T-shaped securing elements 3, 5 are joined to the housing 2 via the base of the T-shaped securing element. See,

Appl. No. 10/593,957
Amdt. dated Jan. 23, 2008
Reply to Office action of Oct. 9, 2007

para. 24, ll. 6-8. In other words, the T-shaped securing elements 3, 5 are formed on the bush holder housing 2. Claim 13 has been amended to emphasize this distinction.

In addition, in order to avoid reading the claimed “housing” on the support plate 64 of Dafler, the language of claim 14 has been incorporated into claim 13 and the two essentially T-shaped elements are now described in claim 13 as being disposed on opposite ends of the housing with the prestressing element being disposed on the housing intermediate the two essentially T-shaped elements.

To support a rejection of a claim under 35 U.S.C. 102(b), it must be shown that each element of the claim is found, either expressly described or under principles of inherency, in a single prior art reference. See Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

Dafler et al does not teach a brush holder of the type recited in claim 13, including a housing for receiving a brush, and a prestressing element, and wherein the housing for receiving the brush is formed with a securing element for securing the brush holder to the electrical machine, the securing element comprising two essentially T-shaped elements disposed on opposite ends of the housing and wherein the prestressing element is disposed on the housing intermediate the two essentially T-shaped elements. Accordingly, claims 13, 15, 20, 27 and 31 are not anticipated by Dafler et al.

Claim 22 has been rejected under 35 U.S.C. 103(a) as unpatentable over Dafler et al in view of Scheucher (US 5,731,650); claims 17-19, 23, 24 and 29 have been rejected under 35 U.S.C. 103(a) as unpatentable over Dafler et al in view of Raymond et al (US 6,536,807);

Appl. No. 10/593,957
Amdt. dated Jan. 23, 2008
Reply to Office action of Oct. 9, 2007

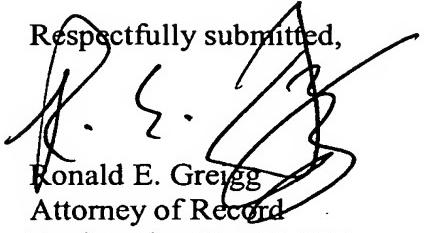
claim 25 has been rejected under 35 U.S.C. 103(a) as unpatentable over Dafler et al in view of Scheucher and Raymond et al (it appears the examiner also intended to include claim 29 in this rejection - again clarification is requested); claim 26 has been rejected under 35 U.S.C. 103(a) as unpatentable over Dafler et al in view of Scheucher and Raymond et al and Bosch (US 4,333,631); and claim 30 has been rejected under 35 U.S.C. 103(a) as unpatentable over Dafler et al in view of Szeteli et al (US 6,270,055) (once again, it appears the examiner also intended to include claim 32 in this rejection - clarification is requested).

None of Scheucher, Raymond et al, Bosch and Szeteli et al teaches that which is lacking in Dafler et al, namely, a brush holder of the type recited in claim 13, including a housing for receiving a brush, and a prestressing element, and wherein the housing for receiving the brush is formed with a securing element for securing the brush holder to the electrical machine, the securing element comprising two essentially T-shaped elements disposed on opposite ends of the housing and wherein the prestressing element is disposed on the housing intermediate the two essentially T-shaped elements. Thus, even if it had been obvious to combine the teachings of Scheucher, Raymond et al, Bosch and Szeteli et al with Dafler et al, as suggested by the examiner, one of ordinary skill in the art would not have arrived at the subject matter defined in claims 13, 15, 17, 19, 20, 22, 23, 25-27 and 29-32.

Please charge the fee for any necessary extension of time to deposit account No. 07-2100.

Appl. No. 10/593,957
Amdt. dated Jan. 23, 2008
Reply to Office action of Oct. 9, 2007

Entry of the amendment and either a corrected non-final Office action or allowance of the application are respectfully requested.

Respectfully submitted,

Ronald E. Greigg
Attorney of Record
Registration No. 31,517
CUSTOMER NO. 02119

GREIGG & GREIGG, P.L.L.C.
1423 Powhatan Street, Suite One
Alexandria, VA 22314
Tel. (703) 838-5500
Fax. (703) 838-5554

REG/JFG/hhl

J:\Bosch\R307200\Reply to 10-09-07 OA.wpd